

view! That is, where management has looked at all. Much of the time, industry has taken for granted that the worker is in good health, and that it is up to him to keep that way. There are many notable exceptions, but industry has not generally included in its obligations or opportunities a program of organized industrial health.

Management in war industries, with its present responsibility for the production of materials in astronomical quantities, now finds it necessary, in order to fulfill that responsibility, to improve and maintain the health of its available manpower. The surplus of labor, which made it possible for industry to make a free selection of its manpower, no longer exists.

Management looks to the physician for guidance and direction in the vital and growing field of industrial health. With the necessity to utilize all available sources of manpower, the industrial physician can institute adequate standards for health conservation of this manpower, as for example, in the employment of women. Secondly, the industrial physician is free of the severely limiting economy of competition because, today, any measure that advances the war effort is supported without stint. Thirdly, management looks to the physician for guidance in the broader problems of industrial health, such as proper placement and not rejection of workers, education in nutrition and personal hygiene; protection on the job from hazardous working conditions; and prevention and control of the general illnesses.

Another resource which the industrial physician now has is the joint interest and cooperative support of organized labor and management. Further, the evergrowing interdependence of persons and functions in modern industry make for improved relationships and for greater freedom to carry out one's functions, because one is freed of the limitation of working alone.

Another factor of importance to the physician is that business is organizing into associations on an industry-wide basis for the self-regulation of industry in its relations with labor and with government. Thereby, the industrial physician's field of work is enlarged, and his effectiveness increased because there is a whole industry to serve rather than a single plant. Not least significant is that in each such organized industry, "the best lead, the rest follow."

Our fighting service men are the best cared for of those of all the nations. It is our task in industry that the same may come to be said of our civilian service men. The challenge alike to the medical fraternity, to organized labor, and to organized management is to secure an abundant and vital health in industry, the like of which we have never known, so that we may produce for war to the utmost.

It is said of Gladstone that he gauged a community by the care it gave its cemeteries. Let an industry be gauged by the care it gives its health.

Federal Reserve Bank Building.

LOS ANGELES MANAGEMENT LOOKS AT INDUSTRIAL HEALTH*

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WITH the advent of the present war, management finds it necessary to focus its attention more and more on the health of the worker.

Although much has been done in accident prevention, progress in medical and health programs is slow of development because management is reluctant to accept suggestions, in the absence of statistical proof that a plan is workable, especially if an additional burden of overhead is required.

Estimates place the lost time arising from disabling illness as high as 2 per cent, and for every person incapacitated because of illness, at least two others are handicapped because of prevalent or chronic diseases to the extent of 10 per cent to 50 per cent of their efficiency. The few studies that have been published show that lost time due to illness and nonindustrial accidents is approximately twelve times as great as lost time due to industrial accidents. Absenteeism due to industrial or occupational diseases probably does not exceed 3 per cent of the total absenteeism.

However, management dislikes estimates and theories, and prefers specific reports such as that of the National Tuberculosis Association or of the R. H. Macy Company, New York City, as published by the National Industrial Conference Board. In 1926, Macy's spent \$4.40 per employee per year for medical care, but as the program for preventive medicine expanded, the per capita medical cost gradually rose to \$8.74 in 1938. Although the average age of employees increased somewhat during this period, the death rate followed a downward trend, and at the low point of 1935 was 50 per cent less than in 1926. Not only did the death rate decrease, but resignations due to poor health dropped from 9.78 per cent in 1926 to only 1.82 per cent in 1938.

For an organization of more than 10,000 persons, absenteeism is not only costly but difficult to control. Nevertheless, Macy's total absence rate for all causes declined from 4.56 per cent in 1928 to 2.44 per cent in 1937, or a reduction in the rate of over 46 per cent. In addition, the sick and death benefits paid per \$1.00 in dues collected by the association declined from \$1.24 in 1926 to \$0.95 in 1938, and dividends (skipped dues) were declared in 1932, 1934, and 1935.

The medical director of Macy's believes that the reductions in the mortality and disability rates are directly attributable to the company's health program. Through improved safety and health measures, it has also been possible, during the past 5 years, for the company to effect an annual saving of nearly \$40,000 in the cost of workmen's compensation.

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PHYSICAL EXAMINATIONS

Most large companies use a physical examination as a prerequisite of employment for the purpose of (1) eliminating those persons who are unfitted for the job and of those with communicable diseases, (2) the detection of and prescription for remediable defects, (3) the proper placement of those unfitted for one type of work, but entirely fitted for another, and (4) the maintenance of the health of those who are healthy when employed. Follow-up examinations at set intervals also have proven very helpful.

The effectiveness of a health program in industry depends upon the coöperation and understanding of all employees. Coöperation with the community and local health agencies is likewise an important factor, for the relation between industrial health and local conditions is obvious.

ELEMENTS IN AN ADEQUATE SERVICE

The work of educating employees as to how to protect and preserve their health falls short of its objectives if a company does not provide adequate health service facilities for the workers. The following working principles may be considered essential to an adequate service:

1. A definitely organized plan for health service.
2. A definitely designated staff of qualified physicians, surgeons, and attendants, with one physician in charge of the service.
3. Adequate emergency, dispensary, and hospital facilities.
4. Preemployment and periodic physical examinations, to be made only by qualified medical examiners.
5. Efficient care of all industrial injuries and occupational diseases.
6. Reasonable first-aid treatment and advice for employees suffering from nonindustrial injuries and illnesses while on duty. For further professional care such employees should be referred to their own private or family physician.
7. Education of the employee in accident prevention and personal hygiene.
8. Elimination or control of all health hazards.
9. Adequate records, including physical examination records, from which statistical summaries and analyses of injuries and illnesses should be made periodically.
10. Supervision of plant sanitation and all health measures for employees by the physician in charge.

These principles prevail to some extent or degree in most of the larger companies. In smaller companies an industrial nurse may take the place of a staff physician. In either case, this person should have training beyond the usual requirements in the general principles of personnel administration, unemployment and workmen's compensation, and a general understanding of the processes as they affect the health of the employees. If the medical services are under the supervision of a nurse, obviously her activities would be under the usual restrictions. Therefore,

the advice and service of a local industrial physician should be required periodically.

DUTIES OF INDUSTRIAL NURSES

The duties of the nurse would include:

1. First aid for injuries or illnesses occurring to employees while on duty. This care is given under standing orders from the physician.
2. Subsequent dressings or care for injuries or illnesses.
3. Equipment and supervision of first-aid boxes placed at desirable locations in the plant.
4. Responsibility for the general set-up of the plant dispensary.
5. Assistance to the physician with physical examinations.
6. Assistance to employees in securing correction of physical defects and social problems.
7. Responsibility for keeping individual records for each patient, and preparation of a regular report for management and the physician.
8. Assistance to safety program through active membership on safety committee.
9. Contribution to plant program of industrial hygiene and sanitation.
10. Contribution to good industrial relations through service as liaison between management and employees.

A nurse to administer treatment in case of accident, and to give counsel and instruction on health problems, not only to employees but to their families as well, has been widely used in the eastern States, but the practice is just gaining momentum here. Some of the insurance companies handling group policies have made this service available to their clients. A company may, however, make independent arrangements for a visiting nurse's service by direct employment, or by contract with an association employing several nurses strategically located within the community. Although it is difficult to establish a proper attitude on the part of the employees in regard to the visiting nurse, she can render, nevertheless, most valuable assistance, and be of service where there exists illness and distress. If, however, she finds no sickness and discovers that an employee is out for other reasons and so reports, she is immediately looked upon as a truant officer trying to meddle into the employee's private affairs. Her position is extremely difficult, and she must of necessity be a person with an unusual amount of tact and the ability to invite confidence if she is to render service to workers in the promotion of health within the organization and outside as well.

OTHER REQUIREMENTS

The need, cost, and value of a health-service program will determine its extent. Now, more than ever, it should make adequate provision for problems arising out of the necessity for employing men and women in jobs to which they may be neither accustomed nor entirely fitted. Good health is among the incentives to production and good industrial relations. From an economic aspect, in the light of Macy's experience, it is

possible to reduce amounts paid in sickness and death benefits, amounts paid in workmen's compensation, and the cost of employees' days lost. It may be assumed, although no reliable estimates are available, that the cost to the employer, when experienced employees are incapacitated by sickness, is at least one and one-half times the daily wage. Undoubtedly some of the factors covered in the study of industrial accident costs also apply to sickness, as for example, (1) cost of lost time of sick employee; (2) cost of time of other employees required to do the work of the absentee; (3) cost of time lost by foremen, supervisors, or other executives to select, train, or break in new employees; (4) cost of idle machines; (5) cost due to interference with production; (6) cost under welfare and benefit systems; (7) cost of continuing the wages of the sick employee in full after his return, although his services may be only worth about half their normal value on account of his condition. Such are the hidden costs comparable to those summarized by authorities on industrial accidents.

Let us not forget also the humanitarian aspect. War will reap its harvest while manpower at home will strive to shorten its duration.

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SAN DIEGO MANAGEMENT LOOKS AT INDUSTRIAL HEALTH*

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THE objective of management in any industrial enterprise is efficient production. In achieving this end, management must take into consideration all factors and conditions, and must maintain them in actual balance.

Within industry, three of the principal factors conditioning efficient production are: (1) plant and facilities, (2) equipment and machinery, and (3) manpower.

Some of the factors determining the efficiency of manpower in the operation of an industrial plant are: careful selection of working personnel; adequate foremanship; sound organization of working force; maintenance of health and morale of personnel; and satisfactory labor relations.

No one of these factors is solely responsible for the successful utilization of manpower in industry. Even the thesis that health is the primary and most essential factor is too simple to be true. This may be said without disparaging the great importance of industrial health. In seeking the most effective employment of manpower in industry, it must be realized that all of the factors act and react upon each other, that each supports and supplements all of the others.

Absenteeism is one of the important factors limiting efficient production. Statistics on the number of man hours lost in industry through absenteeism are appalling. Thus, it has been reported that in a plant employing more than 40,000 workers, there are as many as 2,000 man days a week lost through absenteeism. A very substantial amount of absenteeism could be prevented by more adequate industrial health programs. Provision of proper opportunity for shopping outside of working hours would lessen absenteeism among women charged also with domestic responsibilities.

Enlightened management does regard industrial health as one of the major essentials in the productive enterprise. Accordingly good management is alert not only to the installation and maintenance of adequate plant facilities and machinery, but is equally alert to the adequacy of its program for industrial health, both at the time of induction and throughout the period of employment of its workers.

Physical examination of employees at the time of selection is the general practice of large employers. According to the results of physical examinations employees may be placed in positions for which they are suited. The reluctance on the part of prospective employees to undergo physical examination which has existed in the past is being overcome rapidly. Most applicants for employment now realize that physical examinations are for the protection of the individual and of the group.

Periodic physical examination of employees is not as generally practiced as is physical examination at the time of induction. As techniques for more efficient production are developed, however, it is possible that periodic health examinations will be as fully practiced.

Preventive measures are of more importance than corrective measures. Here again care should be used in interpreting statistics. Thus, a large number of visits to first-aid stations may mean, not a high frequency of accidents due to lack of safety measures, but that employees have been encouraged by management to visit the first-aid station upon receiving very slight injuries, or upon the occurrence of slight ailments. Lack of visits to first-aid stations may mean that employees are careless with respect to minor injuries, and are inclined to "bluff it through," or even are encouraged in that practice by foremen.

One of the major opportunities of management is health education. In many industrial concerns, management has become quite aware of the importance of continuous education with respect to health, not only on the job but also as to personal hygiene and health in the home. As a result of the heavy demands of war production, management has concerned itself with the problems of housing, transportation, nutrition, and fatigue, because it realizes that all of these have their direct effect on the efficiency of the employee.

Management looks at industrial health as one of the most essential factors in the production

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